The History and Present Status of Luperina nickerlii gueneei Doubleday in Britain

By H. N. MICHAELIS*

The earliest known specimens were two found near the ferry at Rhyl, Clwyd in 1860 or 1861 by T. Porter and these were purchased by the Lancashire collector, J. B. Hodgkinson of Preston. They were eventually sent via the Rev'd. H. Burney to H. Doubleday and Doubleday described the moth under Luperina gueneei H. Dbl. n.sp. in the Entomologist's Annual of 1864, p. 123, contained in an article by H. Guard Knaggs; Knaggs here refers to three specimens taken in Wales in 1862 and it seems certain that these were the specimens purchased by Hodgkinson, for he writes in the Entomologist 1885, p.45 that he purchased a third specimen taken in north Wales in 1862 by H. Stephenson. Hodgkinson sent this to Miss H. Sulivan of Fulham "where I suppose it remains". Perhaps after 23 years, one may imagine a thought of unrequited love from this last remark.

The moth next appeared on the sandhills of St. Anneson-Sea, Lancashire taken by Baxter in 1889 and later in conjunction with H. Yates. I was given specimens bearing the Baxter label for 1911 and 1914 by one of his descendants and understand that the locality was destroyed by building development between 1917-1918. There was some confusion as to whether or not the St. Annes specimens were but a form of Luperina testacea (D. & S.), but in 1909 Richard South described these as L. gueneei var. baxteri in the Entomologist, xlii, p. 289, and figured genitalia drawn and described by F. N. Pierce showing the differences between the new species and L. testacea. Later much print was devoted to this by H. J. Turner in Ent. Record 1911, v. 23, pp. 53, 89, 171, 201 and

F. N. Pierce, ibid. p. 269.

The next specimen was found by me at Deganwy, Caernar-vonshire, now Gwynedd, at the edge of the sandhills on 26th August, 1926. This was pale grey with a faint yellowish tinge when found which over the years discoloured to pale ochreous and then resembled my specimens from Baxter. The locality was destroyed by sea erosion in the 1930's, and the growth of the foodplant Agropyron junceiforme Löve is now much reduced. In 1929, the late R. E. Vaughan Roberts found a moth at Prestatyn, Clwyd. This specimen is noted in the rehash of South's "Moths of the British Isles" 1961, though my Caernarvonshire earlier specimen is omitted although shown in S. Gordon Smith's "Butterflies and Moths of Cheshire, Flintshire, Denbighshire, Caernarvonshire, Anglesey and Merionethshire" 1948, p. 126; clearly, someone had not done their homework on distribution.

In 1974, a student from the Nature Conservancy brought me a P for identification from the Clwyd coast taken in early September. This was exhibited at the 1974 British Entomo-

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logical Society Exhibition but was by mischance missed from the list of published exhibits, but this was later remedied with sincere apologies. My efforts to record this species are indeed subject to ill fortune. On 26th August, 1975, together with Mr. and Mrs. J M. Brummitt, I visited the locality and found a number of \$\partial s\$ resting on leaves and stems of \$A\$. junceiforme (sea couch grass) and on the sand nearby, and no \$\partial s\$ were seen. On 2nd August, 1976, I found a few \$\partial s\$ at the Point of Air, Clwyd and on their own initiative, B. Goater and B. Skinner found it common there on 13th August. On 5th August we again visited the original locality for a short time and saw a dozen resting mainly on the foodplant; we examined flowers of marram, lymegrass, yarrow, etc., and though other moths were present, we did not see nickerlii. Some days later, I found a weak colony further west.

B. Goater and B. Skinner called on me on 14th August on their way to Anglesey where they found the moth that evening on the south-west coast. A few days later, I saw six in half an hour to the east of their spot. In conclusion, I luckily found a crippled \mathcal{P} near Conwy, Gwynedd on a weak growth of Agropyron while examining a yet unidentified Scrobipalpa (Gelechiidae). Thus we have had five localities on the mainland—one extinct—and two almost approximated on

Anglesey.

The larva feeds at night, possibly on or below the surface of the sand, and pupates below the surface in a silk cocoon or web. A description of the early stages is given in "Text Book of British Butterflies and Moths" by L. W. Newman and H. A. Leeds 1913, p. 67, under Guenee's Luperina. The moth appears from early August to late September and occurs on flat drifts of sand dunes where the Agropyron is the first dunebinder for we found none on the higher marram bound dunes. In all localities, I noticed that the foodplant had been covered at some time by the high spring and winter tides. It is not attracted by mercury vapour light, though admittedly this was never tried later than 12.30 p.m. L. testacea was particularly abundant in 1976 and swarmed at my garden light from 9-9.30 onwards. Like testacea, it is not attracted to flowers or "sugar" and does not fly readily for only two were netted at dusk.

I have remarked that the forewings (upperside) tend to discolour with age from pale grey or grey, slightly tinged with yellow, to a pale ochreous; this happened to my Deganwy specimen now in Manchester Museum. The specimens of gueneei figured on a fine plate with an article by Barry Goater, Ent. Gazette, v. 27, p. 141, are clearly old specimens with fw. ochreous and do not approximate to the colour of fresh specimens. It is hoped that the figures on plates for the forth-coming volume of "The Butterflies and Moths of Great Britain and Ireland" do not repeat this discoloration. Doubleday's description of 1864 fits the species well, though I cannot agree with his "anterior wings pale testaceous" for I have always thought testaceous means brick-red, which is confirmed by a

recent Chamber's 20th Century Dictionary; possibly the meaning of the word has changed over the past hundred years, or perhaps the specimens described in 1864 had been exposed to light for two years. In any case I cannot visualise the forewing colour as pale brick red. As regards the similarity to L. testacea, a quick field identification would be: if cilia of hindwings is a clear white you will find you have nickerlii, while cilia of ochreous grey or grey would indicate testacea.

Luperina nickerlii gueneei is found only on the seaside edge of sandhills where A. junceiforme and A. pungens grow, i.e. under sea salt conditions; so it appears is leechi subsp. nov. Luperina nickerlii nickerlii Freyer is found in Bohemia where such ecological conditions do not occur. Has anyone with adequate facilities carefully compared the Bohemian species with the two British and one Irish subspecies, or considered if it were worth so doing?

Conservation: though apparently well spread in small colonies, the main dangers are from sea erosion and holiday development with chalet and caravan sites on the landward side of the dunes on an overworked holiday coast, especially from mid-July to early September. The dunes are less disturbed in the earlier and later months when the larvae are feeding. It is also expected there will be some collecting pressure and it is hoped that moderation will be exercised both in north Wales and in Cornwall.

TRYPOPHLOEUS ASPERATUS GYLL. (COL.: SCOLYTIDAE) IN S.E. LONDON. — A specimen of this extremely local barkbeetle (=Cryphalus binodulus Ratz.) came to my m.v. lamp here at Charlton on the night of 26.vi.76. The rather few British records are scattered and mainly not south-eastern, the only such being quite old: Highgate (Janson) and Forest Hill (Champion) in Fowler, 1891, Col. Brit. Isl., 5: 431. The writer published what appeared to be the first for Kent in 1958, Ent. mon. Mag., 94: 216, on a specimen from Darenth Wood. The present capture seems to be only the second for the county and the first modern one for the London suburbs. The beetle may have come from a Lombardy poplar nearby, or from white poplars not far off. The nearest aspens (the usual host in Britain) are in the Shooters Hill woods, barely two miles distant; willows, too, occur locally in some plenty, but require confirmation as a host of T. asperatus in this country. Besides this, I can add only one to the handful of records given under the above references, viz. Hartlebury, Worcs. (G. H. Ashe). Perhaps if various species of Populus recently dead or bearing dead twigs or boughs were to be carefully worked, this little rarity might be more often encountered. Several closely related species occur abroad on trees of this genus; one of them, T. granulatus Ratz., has been taken once in Britain (cf. Fowler, l.c.), but seems doubtfully native. — A. A. Allen, 49 Montcalm Road, Charlton, London, SE7 8OG.